

EYESTE, L.

Hungarian Technical Abat.
Vol. 6 No. 1
1954

17. A few questions on the production of glutamic acid — A glutamic acid hydrochloride synthesis
1. Holló and Nyerges. (Food Industry — Industrial
Facts — Vol. 7, 1953, No. 3, pp. 82-83, 4 figs.)

Systematic investigations were conducted on the industrial production of glutamic acid and its derivatives. It has been ascertained that hydrolysis could be best carried out by the application of hydrochloric acid of spec. gr. 1.182, since more diluted acids have a detrimental effect on the yield. A much purer glutamic acid can be obtained with a 2.5 fold amount of acid and by adding 1% stannous chloride. Hydrolysis takes 6 hours. It is advisable to clarify the liquor with activated carbon the quantity of which should constitute 15 to 18% of the solids of the gluten. The crude glutamic acid hydrochloride may be recrystallized from a fivefold quantity of 6 n hydrochloric acid. Neutralizing the solution of the hydrochloride to the iso-electric point (pH 5.8 to 3.4) with sodium hydroxide the free glutamic acid separates. 70 to 75% of the theoretical yield can be arrived at by starting from crude hydrochloride and 65% by recrystallizing the product from hydrochloric acid.

NYESTE, L. and others .

NYESTE, L., and others. - Elelmzesi Ipar - Vol. 9, no. 5, May 1955.

Utilization of agricultural waste materials for forage by enriching their
vitamin content. p. 148.

SO: Monthly list of East European Accessions, (EEAL), LC, Vol. 4, No. 9, Sept. 1955
Uncl.

NYESTE, L.

V08. Experiments on the production of riboflavin. J. Hol-
lo, Gy. Szamel, L. Nyeste, R. Tengely.
Elektromos Ipar, Vol. 10, 1950, No. 2, pp. 33-39, 6 figs.,
3 tabs.

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WV
Cheap domestic agricultural wastes and by products were examined as potential raw materials for the microbiological production of riboflavin. According to the experimental findings casein broth, molasses, maize steep liquor, casein distillers' wash, acetone butanol fermentation liquor, maize sprouts and malt sprouts yield fair quantities of riboflavin. The results of substitution experiments show that the addition of yeast extract or yeast extract and glucose to the culture medium increases the yield. The best culture medium was found to be a mixture of yeast extract combined with maize extract, maize steep liquor, distillers' wash or molasses as carbohydrate sources. Yields of 400 µg/gm riboflavin were obtained by sterilizing this medium in shaken or swirled animal culture. The initial pH of 6.5 decreased on the first day of fermentation but later it increased again. At the end of the process reached pH 7.5. The culture medium containing yeast extract, maize steep liquor and glucose after a second day of fermentation the yield subsequently decreasing with the decomposition of the culture medium. The inoculum was prepared from the yeast extract-glucose peptone medium. For the preservation of the original culture of *Lactobacillus* as by the alternate application of the Wickerham medium and the malt-agar medium was found the most suitable.

NYESTE, Laszlo

Selection of strains of molds of high pectolytic activity. Elelm
ipar 13 no.6:196-198 Je '59.

1. Műszaki Egyetem Mezőgazdasági Ipari Kemiai Technológiai
Tanszék.

HOLLO, Janos, Dr.; NYERSTE, Laszlo

Production and use on enzyme preparations from microorganisms.
Elelm ipar 14 no.3:65-74 Mr '60.

1. Budapesti Muzaki Egyetem, Mezogazdasagi Kemial Tanszek.

NYESTE, Laszlo; PETROWI GEHER, Marta

Effect of the activating and inhibiting compounds on the
polygalacturonase components of *Aspergillus niger*. Elelm
ipar 15 no.3:84-89 Mr '61.

1. Budapesti Műszaki Egyetem, Mezőgazdasági Kémiai Technológiai
Tanszék

HOLLO, Janos; NYESTE, Laszlo

Some questions in principle of antibiotics research.
Magy kem lap 16 no.7:301-307 J1 '61

1. Budapesti Műszaki Egyetem Mezőgazdasági Kemiai Technológiai Tanszék.

*

NYESTE, Laszlo, dr.

On the 2d International Symposium on the Continuous Breeding of
Microorganisms. Elelm ipar 17 no.7:211-216 J1 '63.

1. Budapesti Műszaki Egyetem Mezőgazdasági Kémiai Technológiai
Tanszék.

HOLLÓ, János, dr.; NÉMETH, LÁSZLÓ, dr.

Some theoretical questions relating to the continuous fermentation.
Élelm. ipar 18 no.3:69-79 Mr '64

1. Chair of Agricultural Chemical Technology, Budapest Technical
University, Budapest.

NYSETE, Laszlo, kandidatus

Report of the debate on the dissertation presented by Ferenc
Simek for obtaining the title of Candidate of Chemical Sciences.
Kem tud kozl MTA 21 no. 3:350-350 '64.

NYEZLIN, S. M.

Results of the fight against tuberculosis. Tuberk.
kerdosei 5 no. 3:33-35 Sept 1953. (CML 25:5)

1. Originally appeared in Novosti meditsiny, No. 29,
1950, pp. 42-47.

NYGERGES, Janos

What does the frequency of industrial accidents indicate? Munka 14
no.4:14-15 Ap '64.

1. Chief Inspector, Division of Industrial Safety, Trade Union of
Iron and Metal Industry Workers, Budapest.

NYERGES, Pal, tudomanyos fomunkatars

Experiences obtained in English atomic power plants. Energia
es atom 17 no. 10:476-485 O '64.

1. Electric Power Industry Research Institute, Budapest.

AUTHORS:

Almássy, Gyula, Kotsis, Endre

5/081/62/000/019/020/053
B144/B180

TITLE:

Purification of commercial selenium.

PERIODICAL:

19K84 (Hung. Patent. Khimiya, no. 19, 1962, 341, abstract)

TEXT: A concentrated solution is obtained by dissolving commercial selenium in H_2O_3 and H_2SO_4 and extracting it with H_2O -immiscible alcohols. On dilution, Se passes into the alcoholic, while all the impurities remain in the aqueous phase. Example. 11 kg commercial Se is dissolved in concentrated H_2O_3 and H_2SO_4 and the insoluble residue separated. The concentration of the solution is fixed at 10% (with H_2SO_4). 50 l of the solution is extracted by shaking with 30 l isobutanol. The alcoholic phase (80 l) is separated and the aqueous phase is again shaken with 20 l isobutanol. I.e. two alcoholic phases are mixed and reextracted with an equal volume of dis-
- and 1/2

Purification of ...

S/081/62/000/019/020/023
B14./B180

tilled water. The aqueous phase is separated from the alcoholic phase and SO_2 gas is passed through the latter. When a precipitation has formed the solution is heated and the red precipitation turns black. The precipitation is filtered in vacuo and dried at 100°C . The yield is 9 kg powdered Se of 99.99% purity. The product is distilled in a quartz flask provided with a dust catcher and a granulator. The granulate is selenium of 99.999% purity. The aqueous phase is recycled; isobutanol is regenerated from the alcoholic phase by distillation. [Abstracter's note: Complete translation.]

Card 2/2

NYILAS, IMRE

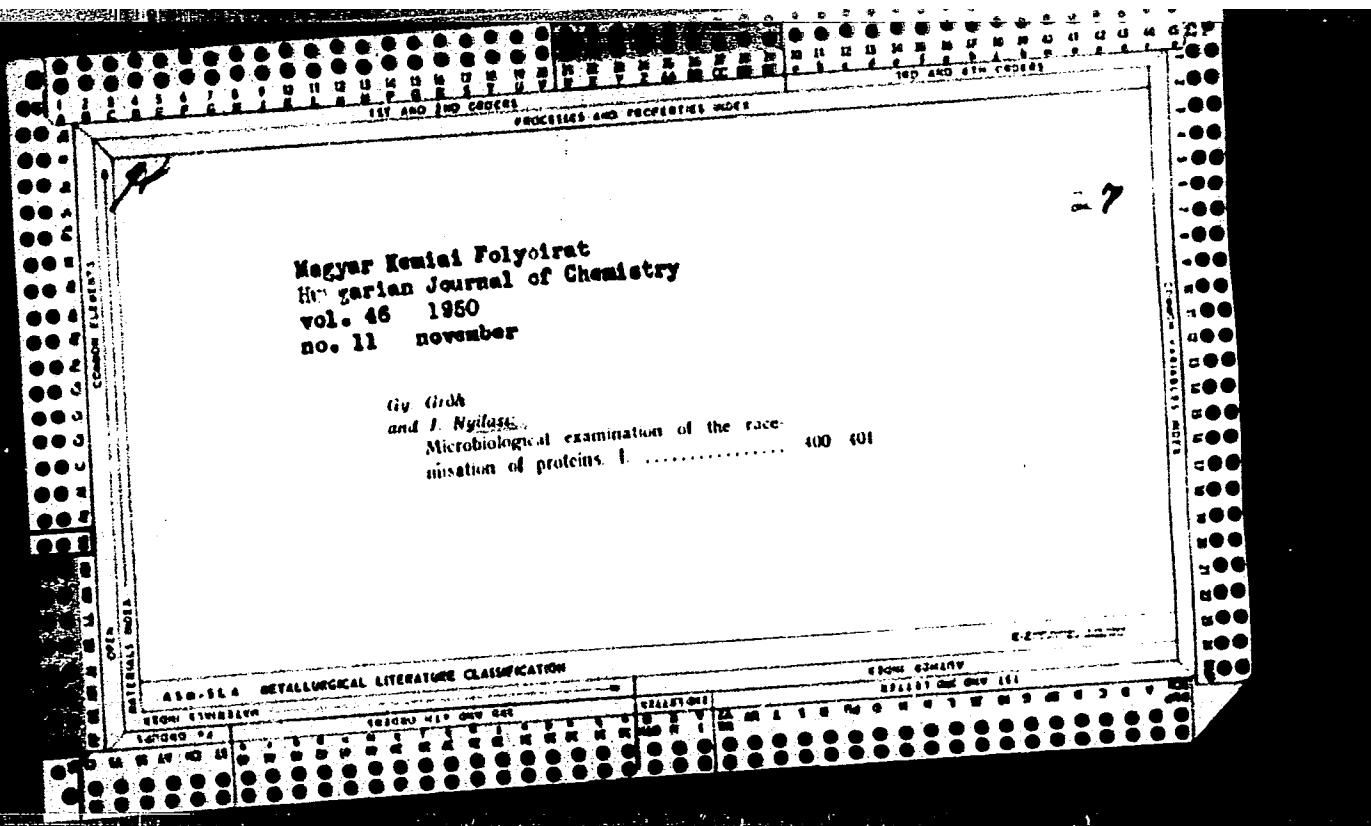
✓ Biological assay of antibiotics with the hole plate method
using indicators. Imre Nyilas. Yearbook Inst. Agr. Chem.
Technol., Univ. Tech. Sci. Budapest, Hung. 1932 III-1934
VIII, 154-63.—Methylene blue and triphenyltetrazolium
chloride were used as indicators in the detn. of penicillin.

J. A. Sillard

NYILAS, Jozsef, dr.

Are the atomic power plants economical? Elet tud 15 no.20:
628-631 15 My '60.

1. Marx Karoly Kozgazdasagtudomanyi Egyetem tudomanyos
munkatarsa.



CA

Investigations on the origin of ammonia liberated in the alkaline hydrolysis of zein. [Ivan Flindt (Univ. Gedächtnis). Major, Kau. Polyedr. Ser., 1952, 20 (1952).—Zein was produced by the Osborne method and hydrolyzed in $N\text{NaOH}$ at 10°. Zein (1 g.) with a dry matter content of 61.07% (contg. 16.2 mg. $\text{NH}_2\text{-N}$) evolved 34.0 mg. $\text{NH}_2\text{-N}$ in 4 hrs. This amt. did not increase after 24 hrs. Since 1 g. zein contains only 24.03 mg. amide-N, it is evident that other amino acids also decompose during the hydrolysis. To test the behavior of the various amino acids, the content of arginine, histidine, tyrosine, serine, and threonine was determined both in native zein and in zein hydrolyzed 8 hrs. in an alk. medium. Arginine, histidine, and tyrosine showed no change during hydrolysis. The native zein contained serine-N 0.15 and threonine-N 4.04 mg. dryd. by the Rees method (C.A. 41, 2767f). After 8 hrs., the serine-N and threonine-N contents were 2.81 and 0.43 mg., resp. This indicates that the Rees correction used in the evaluation of the results obtained in the 24-hr. boiling process with HCl hydrolyzed by alkali. Pure serine was not affected by such a hydrolysis. When samples of a zein soln. in $N\text{NaOH}$ kept at room temp. were taken after 45, 117, 189, and 237 hrs., the actual amt. of $\text{NH}_2\text{-N}$ liberated was always considerably lower than alkali was weaker with zein than that of hot alkali. This supports the theory that this change is due to scission of the peptide bonds in an alk. medium. 10 references. Ivan Flindt

C.4.

II A

Microbiological examination of the racemization of proteins. I. Measurement of racemization velocity of certain amino acids. Gyula Gróh and János Nyílasi (Eötvös Univ., Budapest). Magyar Kém. Folyóirat 56, 410-1 (1950). — The Dakin method (C.A. 7, 480) gives data on the question whether certain groups of amino acids become enolized, and racemized to a certain degree, as regards the chain portion $-\text{NH}-\text{CH}(\text{O})-\text{C}-\text{NH}-$, when proteins are



treated with dil. alkalies. Microbiol. assay gave reliable results since bacteria exclusively use the L-amino acids. The amino-acid content of a protein before and after such microbiol. treatment shows an apparent loss of amino acids which is due to enolization and racemization. When a 1.0% gelatin soln. was adjusted to 1.0 N as regards NaOH and kept at 9° for 318 hrs., the samples taken at various intervals showed (when hydrolyzed by boiling with 20% HCl for 24 hrs.), after removal of HCl, a decreased amino-acid content (determined microbiologically). Arginine was enolized in 2 phases. The amino-acid N content (expressed in per cent of total N content of gelatin) was: arginine 15.05% (in native gelatin) and 7.07% (in gelatin treated for 318 hrs.); serine 2.41, 1.66; threonine 1.32, 0.64; valine 2.45, 1.62; phenylalanine 1.20, 0.60; proline 0.44, 4.14; tyrosine 4.02, 3.27, and histidine 0.95, 0.66%, resp. István Pinty

CA

The decomposition of arginine in the alkaline hydrolysis of gelatin. Gyula Grán and János Nyíriai (Budapest Univ., Budapest). Magyar Kém. Folyóirat' 36, 444-7(1961). During investigations on the rate of hydrolysis of various proteins in silk medium, the rate of liberation of $\text{NH}_2\text{-N}$ and amino-N was determined. In $N \text{ NaOH}$ at 100° , serine and threonine yielded $\text{NH}_2\text{-N}$ in any type of protein, whereas arginine was removed as $\text{NH}_2\text{-NH}_2$. The arginine in elastin and gelatin decomposed in alkaline. This indicates that the velocity of liberation $\text{NH}_2\text{-N}$ and amino-N is affected if the velocity of the protein is allowed to stand at room temp. the silk soln. to treating at 100° . Further expts. were conducted to investigate this problem. A $N \text{ NaOH}$ soln. was used for dissolving 1.0% gelatin, and a portion of this soln. was immediately hydrolyzed at 100° , whereas other portions were kept 144 or 312 hrs. in a thermostat at 11° and then hydrolyzed at 100° . The analysis of samples taken from time to time proved that the arginine of gelatin decomps. in freshly-prepd. saline, forming urea. When, however, the soln. is allowed to stand before treatment, the velocity of liberation decreases, probably because arginine is intermediate-converted to citrullin when hydrolyzed at 100° .

This change is explained by the emulsion of peptide complex of arginine by the fastening effect of cold alkali. The amino-N contents were also determined in the diethyl residues of the texts. When the freshly-prepd. protein solns. were treated with urease, the amino-N curve was depressed. Rising amino-N content curves were, however, obtained, when urease was added to protein solns. which were allowed to stand with alkali for longer periods. This is explained by the peptide-decomposing effect of urease on gelatin. Further expts. are planned to prove this assumption.

István Nyíriai

CA

4A

Catalytic effect of Ergon glass on the alkaline hydrolysis of gliadin. Gyula Gerec and János Nyikai (Rótvölgy Univ., Budapest, Hung.). Magyar Kém. Folyóirat 57, 10-11 (1951).—When etching, the velocity of hydrolysis of proteins in 1.0 N alkali at 100°, the results showed poor reproducibility. Comparative expts. in quartz and glass beakers proved that minute amounts of As and Fe in Ergon glass caused catalytic effects. When gliadin was hydrolyzed at 100° in 1.0 N NaOH in quartz or in glass beakers, the amts. of liberated amino N were equal in the 1st 8 hrs. and then remained unchanged in the quartz beaker. A further steady rise was observed in the Ergon glass beaker. When Ergon glass beakers were previously treated with either 1.0 N NaOH 40 hrs. at 100° or with concd. H₂SO₄ 20 hrs. at 100°, the amt. of amino N liberated during alk. hydrolysis was the same as in the quartz beaker. István Kinaly

J. NYILASI, Z. KOVATS

"Biurete reaction of proteins. I. On the coppercomplex ligature of gelatine." p. 451
(ACTA CHIMICA ACADEMIAE SCIENTIARUM HUNGARICAE, Vol. 2, No. 4, 1952, Budapest, Hungary)

SO: Monthly List of East European Accessions, L.C., Vol. 2 No. 7, July 1953, Uncl.

NYILASI, J.

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Biological Chemistry

(S)

"Biuret test of proteins. II. The copper complex of edestin. J.J. Nyilasi and Z. Kováts (Eotvos Univ., Budapest). Acta Chim. Acad. Sci. Hung. 3, 273-80 (1953) (in German); cf. C.A. 47, 54697. —Sols. of edestin (I) (concn. not given) in 1.0 and 0.1 N NaOH, in the presence and absence of sufficient Cu for complex formation, were kept at 25° for 357 hrs. while the following observations were made: The rate of formation of NH₃ and of amino N in the absence of Cu was much greater than in the presence of Cu (data presented only graphically). Paper chromatograms of the 0.1 N NaOH soln. of I showed the presence of free aspartic acid (II) and glycine (III) after 104 hrs. and of free leucine (IV) and alanine (V) after 330 hrs. Chromatograms of the N NaOH soln. of I showed the presence of traces of free II and III after 17 hrs. and of IV, V, serine, threonine, proline, and valine after 330 hrs. J. P. Dauchy

NYILASI, J.

(2) Chem 4

547.962.9-156-98G : 542.457 Biuret

5. The biuret reaction of proteins, I. Investigation
of the copper complex of gelatin — A fehérje biuret-
reakidjelző. I. A gelatin rekonplexének vizsgálata ✓
Nyilasi and Z. Kovács. (Hungarian Journal of Chemistry
— Magyar Kémiai Folyóirat — Vol. 59, 1953 No. 2, pp.
33-35, 2 figs., 2 tabs.)

The influence of alkaline compounds on the rate
of hydrolysis and racemization of the biuret complex
of gelatin was investigated. Considering the rate of
desamination it was found that more ammonia was
liberated from the copper-containing mixtures than from
solutions not containing copper which was probably
due, in the former case, to the partial desamination of
the glycine present. By comparing the desamination
rate and the data obtained on free amino acids by paper
chromatography it was evident that the biuret complex
is more resistant to alkaline hydrolysis than the free
protein itself. By the application of microbiological
methods it was established that under experimental
conditions the amino acids of the biuret complex do
not undergo racemization. In the application of the
Leising theory the following interpretation was advanced:
the quaternization of the $-CH(R)-CO-$ bond is prevented
by the formation of the complex; hence the racemization
of the amino acid members is also checked. J. Ny.

8-31-51
JPF

NYILASI, J.

Hungarian Technical Abst.
Vol. 6 No. 1
1954

(3) Photo

547 961 goot. 4 : 0416 - 774-511-05
16. Investigations on the chemical structure of collagen and of gelatin for photographic emulsions
A kolagen és g-fotocellulóz kémiai szerkezetének vizsgálatai - Gy. Gróf, J. Nyilasi and Z. Kádár. (Hungarian Journal of Chemistry — Magyar Kémiai Folyóirat — Vol. 59, 1953, No. 2, pp. 54-57, 2 tab.)

In connection with the experiments conducted for the preparation of gelatin for photographic emulsions the question arose whether the peptide linkages of the skin tissues are enolized by the alkaline treatment during the processing as it was assumed by Dabiu and collabs. in the case of alkaline-treated peptides. Experiments yielded the following results: (1) Isomerization occurred in peptized collagen as an effect of sodium hydroxide treatment. On the contrary there was no such effect if lime was used although the pH of the solution was almost identical. (2) The enolic character of the peptide linkages presumably remains unaltered in gelatin obtained by the sodium hydroxide treatment of collagen. (3) The gelling power and viscosity values are higher in gelatin obtained by the sodium hydroxide treatment than in the product prepared by the lime process. J. Ny.

Dab. 1/28

J. NYILASI

36. Biuret reactions of proteins. II. Studies on the copper complex of edestin - A fehérjéből binikettrapasztardról; II. Az edestin részkomplexből visszalépet - J. Nyilasi and Z. Kovács, (Hungarian Journal of Chemistry) *Magyar Kémiai Folyóirat* - Vol. 59, 1953, No. 5, pp. 129-131, 2 figs., 1 tab.)

In investigating the rate of liberation of ammonia and of amino groups in the case of edestin and the edestin-copper complex during alkaline hydrolysis it was found that the complex is more resistant to this action than the pure protein itself. The liberated amino acids were determined by paper chromatography and the results led to the same conclusion. The formation of the protein-copper complex apparently inhibits the Dahl's type enolization respectively racemization of the different amino acids in the case of edestin in analogy with earlier experiments carried out with gelatin. These findings correspond with the deductions of Rising, Puskas and Poroshin concerning the structure of the biuret complex.

J. Ny.

HUNG.

5. Biuret reactions of proteins, III. Studies on the nickel and cobalt complexes of gelatin - A folyóirat
biuretreakciójáról III. A gelatin nikkel- és kobaltkomplex-
nek vizsgálata - I. Nyilasi and Z. Kováts. (Hungarian
Journal of Chemistry - Magyar Kémiai Folyóirat - Vol.
59, 1953, No. 10, pp. 300-304, 3 figs., 3 tabs.)

Investigations formerly made on the copper complexes of proteins were extended to the nickel and cobalt complexes of gelatin. By measuring the hydrolysis rate it was established that complex formation — generally a slow process depending on the experimental conditions — is accompanied by the desamination of glycocoll. Experiments carried out to measure the ratio of the liberation of amino groups and to detect the free amino acids led to the conclusion that copper exercises the most powerful protective action followed by nickel and then by cobalt. Microbiological investigations showed that nickel and cobalt bound in a complex form inhibit the racemization of the amino acids — similarly to copper — and hence the configuration of the asymmetric carbon atoms remain uniform. The following conclusion can be drawn: Nickel and cobalt are bound primarily to the nitrogen atoms of the enolized peptide links in the same manner as copper. All amino acids which show a tendency to racemization in the absence of metals take part in the complex formation. The rate of combination of the metals with single amino acid parts is at least of the same magnitude as the enolization rate of the -CH₂-NH-CO- bonds in the case of pure proteins.

Nyilas, J.

Biuret test of proteins. III. Nickel and cobalt complexes of gelatin. J. Nyilas and Z. Kováts (Budapest Univ., Budapest). *Acta Chim. Acad. Sci. Hung.*, 4, 11-19 (1954) (in German); cf. *C.A.* 48, 5234d.—Detsns. analogous to those made on the Cu complex (I) of gelatin (II) (cf. *C.A.* 47, 5463f) are extended to the Ni (III) and Co complexes (IV). Curves show time vs. (1) $\log I_0/I$ (detd. by Pulfrich photometer and showing 90 and 500 hrs. as the time of formation of III and IV, resp.), (2) mg. NH₃ produced per g. II when I-IV stand in alk. medium (showing that the formation of III and IV, like that of I, is accompanied mainly by the partial deamination of glycine), and (3) mg. amino N produced from I-IV under similar conditions (showing the protecting effect of the metals, Cu > Ni > Co). Similar gradations are shown by chromatograms of solns. of III and IV under the same conditions as those for I (*loc. cit.*), whereby free amino acids are liberated in a much shorter time in the cases of III and IV. Microbiol. investigations of amino acids freed from III and IV after long (7-580 hrs.) standing show that racemization has been completely inhibited by Ni and Co. It is concluded, as in the case of Cu, that Ni and Co are linked mainly to the N atoms of enolized peptide groups, and hence enolization of the asymmetric C atom and the resulting racemization is hindered (cf. Jesserer and Lieben, *C.A.* 33, 637). H. S. F.

WU

Nyilasi, J.

26. The biuret reactions of proteins. IV. Racemization of gelatin-biuret complexes containing varying amounts of copper — J. Nyilasi. (*Mugyar Kémiai Folyóirat* — Vol. 60, 1957, No. 10, pp. 296—300, 6 figs., 1 tab.)

A method was evolved to determine the sequence and extent of the metal binding power of the various amino acids during the formation of protein-biuret complexes. The method is based on the measurement of the rate or degree of racemization of the amino acid constituents of a protein in alkaline media, and then repeating the measurements with the biuret complex of the same protein containing different amounts of copper in media of identical alkalinity. Based on these variations in the racemization conclusions can be drawn concerning the spot and extent of metal binding. This experiments were carried out with gelatin and it was found that under the experimental conditions employed especially the basic and hydroxy amino acids excel by their metal binding power.

CH

NYILASU

Bluet reaction of proteins. IV. Racemization of gelatin-bluel complexes of different copper content. J. Nyilas (L. Eötvös Univ., Budapest). *Acta Chir. Acad. Sci. Hung.* 6: 275-85 (1955) [in German (English summary), cf. *J. A. 49*: 692]. — The prevention of changes in the degree of racemization of amino acids in alkali by bluet formation was used for the determination of the place and degree of the Cu binding in gelatin. A 1% gelatin soln. in *N* NaOH was made to react with 10-100% of the max. amt. CuSO₄ (119.2 mg Cu/g protein). After standing for 4-250 hrs at 25°, the protein was hydrolyzed and the amino acids were determined microbiologically. Gelatin in NaOH alone was used for a control. The formation of the Cu complex having 50 or 100% of the optimum amt. Cu reduced the racemization of arginine, histidine, lysine, serine, and threonine. Use of only 10% of the max. amt. Cu affected only histidine and probably the optically inactive glycine. Increase of the Cu to 25% of the max. influenced also the racemization of serine. The racemization of glutamic acid, aspartic acid, alanine, valine, leucine, proline, phenylalanine, and methionine was not affected by the copper treatment.

Nyikasi, János

7233* Biuret Reaction of Proteins. A fehérjék biuretreakciójáról. VI. Investigation of Racemizing in Gluten. Biuret Complexes of Varying Copper Contents. Különböző rézmenyiségek tartalmazó glüadin-biuretkomplexelek racemizálásának vizsgálata. (Hungarian.) János Nyikasi. Magyar Kémiai Folyóirat, v. 62, no. 2, Feb. 1956, p. 46-47.

Investigation of data characterizing the capacity of various amino acids to form complexes. Tablo. 19 ref.

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Copper complexes of glycine. János Nyíriai and Eva G. Vargha (Eötvös Lóránd (Budapest), Magyar Kém. Polygraf 67, 339-42 (1958).—Glycine-Cu complexes were prep'd. by adding sufficient NaCl to solns. of CuSO₄ and glycine so that the final concn. of free base was N. The amt. of NH₃ developed at 100° was measured. With complexes contg. 0.5 at. wt. of Cu for each mol. wt. of glycine, sigmoid curves were obtained showing autocatalysis. Lowering the no. of at. wts. of Cu per mol. of glycine to 1/4 Cu resulted in lower rates. From 1/4 Cu to 1/16 Cu the rates rose again inversely proportional to the Cu content, and from 1/16 to 1/32 Cu the rates fell with the Cu content. Bubbling air through the reaction mixts. resulted in higher rates. It is concluded that the formation of NH₃ is dependent on heterogeneous catalysis by the CuO present and also on the contact between the mixt. and oxygen.

Saul Patal

Distr: 4E3d/4E2c(j)

The Elman test for gliadins. In investigation of the
recognition of gliadin-gluten complexes containing dif-
ferent quantities of copper. (25) In
Budapest, at the Institute of Agricultural Chemistry,
Hungary, Dr. J. L. Elman and Dr. G. S. Rosinsky
of the University of Illinois, Urbana, Illinois, U.S.A.
Dr. Rosinsky has determined the relative gliadins of a series of amino acids. Under the experimental conditions (25)
[in 0.1M NaOH], arginine, tyrosine, glutamic acid, valine, and
leucine showed high activity, histidine, phenylalanine,
threonine, and methionine moderate, and alanine and serine
low activity. Comparison of 10% of the gliadins of gliadin and prolamins.

These amino acids depends apparently on the structure of the
Norinda Rosinsky

By my

Nyilasi, J.

✓ Microbiological examination of the racemization of proteins. III. The racemization of gliadin. J. Nyilasi
(Eötvös L. Univ., Budapest). *Acta Chim. Acad. Sci. Hung.* 10, 353-6 (1957) (in German); cf. *C.A.*, 50, 5051b. —

The racemization of certain amino-acids of gliadin was investigated at 25° in 0.1*N* and *N* NaOH. In 0.1*N* NaOH serine (I) and histidine (II) are almost 100% racemized while proline (III), valine, and leucine are not racemized, whereas in *N* NaOH threonine, arginine, and lysine in addition to I and II are almost completely racemized while only III is still not racemized. These results are summarized together with data obtained earlier with gelatin and edestin. N. H.

NYILASI, JANOS

HUNGARY/Physical Chemistry - Kinetics, Combustions,
Explosions, Topochemistry, Catalysis.

B-9

Abs Jour : Ref Zhur - Khimiya, No 5, 1958, 13804

Author : Janos Nyilasi.

Inst :

Title : Catalytic Action of Copper Complexes on Glycol Decomposi-
tion Rate.

Orig Pub : Magyar kem. folyoirat, 1957, 63, No 6-7, 192-197

Abstract : The catalytic influence of various compounds on the disami-
nation rate of copper-glycol complexes was studied at 100°
in 1 n. alkali solution. Mainly catalysts containing a hy-
droxyl group considerably accelerate the glycol fission
with the separation of NH₃. Mixed complexes containing
different constituents were used in order to clarify the
catalytic action.

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NYILASI, J.

Distr: 4E2c(1)

The copper complex of glycine. J. Nyilasi and B. Varga (Eötvös Univ., Budapest). *J. Macromol. Sci. Hung.* 14, 113-23 (1958) (in German). — The rate of deamination of Cu-H₂NCH₂CO₂H complexes at 100° in a N alk. medium depends on the glycine-Cu ratio and the availability of O. The ratios varied from 1:0.8 to 1:0.0035 moles. The complexes were formed by adding CuSO₄ to 1 g. glycine (I) dissolved in a little H₂O; NaOH soln. was then added so that after pptn. of Cu(OH)₂ and diln. to 100 ml. the concn. would be N. Kjeldahl flasks contg. 10-ml. aliquots were immersed in a 100° bath. The NH₃ liberated from each was led into 2% H₂BO₃. After varying time intervals the flasks were removed and cooled. The pH was adjusted to 11 with borate-NaOH buffer soln. and the NH₃ vacuum-distd. at 40° into 0.0143N H₂SO₄. Excess acid was titrated with 0.0333N NaOH. As the Cu per mole I is decreased to 1/8 mole, the initial induction period disappears; as it is decreased further to 1/16 mole, the rate of deamination increases, then falls with further reduction in Cu. Blowing air through the solns. during deamination increases the rate for all mixts. and shifts the max. rate to the mixt. of 1:1/8 ratio. Hardly any deamination is observed if N is substituted for air. In the mixt. contg. the most Cu, from which CuO is ptd., a heterogeneous catalysis may be assumed; where all Cu is in the form of the complex, the reaction may be regarded as homogeneously catalytic. The mechanism probably consists of an oxidation step followed by breaking of the N-C bond to give OHCCO₂H and NH₃.

6
2 May
JF

HUNGARY/Physical Chemistry. Kinetics. Combustion. Explosions.
Topochemistry. Catalysis.

B

Abs Jour: Ref Zhur-Khin., No 5, 1959, 14630.

Author : Nyilasi J.

Inst :

Title : The Catalytic Effect of Copper Complexes on the De-composition Rate of Glycocol.

Orig Pub: Acta chin. Acad. scient. hung., 1958, 15, No 1, 51-63.

Abstract: No abstract.

Card : 1/1

J. Nyilasi

Diatri: 4E2c(j)

The copper-ethylenediaminetetraacetic acid complex, J. Nyilasi (Eotvos Univ., Budapest), *Acta Chim. Acad. Sci. Hung.*, 16, 130 (1958) (in German); cf. C.A. 52, 10036c, 14723a. NH_3 is liberated from hot (100°) 1N NaOH solns. contg. 0.05 moles of ethylenediaminetetraacetic acid (Z) per l., and varying amounts of CuSO_4 if Cu:Z is between 0.5 and 1.0 and the system is in contact with air. No NH_3 is liberated under a N atm., and only small amounts if Cu:Z is 0.2-0.5 or 1.0-2.0. No pptn. occurs if $\text{Cu:Z} \leq 0.4$; CuO is pptd. if $\text{Cu:Z} = 0.5-1.0$; and chiefly CuO is pptd. if $\text{Cu:Z} \geq 1.2$. The Cu:Z ratio needed to produce the max. amt. of NH_3 in a fixed time decreases slightly with increasing time; in 8 hrs. at $\text{Cu:Z} = 0.7$ over 60% of the N is released. Similar expts. with $\text{H}_2\text{N}(\text{CH}_2)_n\text{NH}_2$ (en) instead of Z give NH_3 at $\text{Cu:en} = 0.25-2.0$ only if air is present. A mechanism suggested for the deamination of Z in the presence of Cu involves: (1) formation in the alk. soln. of a hydroxo complex, $[\text{Cu}(\text{OH})_2\text{Z}^-]$, which slowly absorbs O to give finally $(\text{Cu en})^{++}$; and (2) oxidation of the en complex to CuO , NH_3 , and glyoxal (or $\text{H}_2\text{C}_2\text{O}_4$), which is responsible for the reduction to CuO . $\text{H}_2\text{C}_2\text{O}_4$ accelerates the deamination of Z in the presence of Cu. Nitrilotriacetic acid under similar conditions (0.25-1.0 g. atoms Cu per mole nitrilotriacetic acid) is not deaminated. Richard H. Jaquith

3
2-May
1

2-1

Distr:
4E2c(j)

Rate of configuration in the catalytic deamination of the copper complex of alanine. János Nyíri (L. Eötvös Univ., Budapest). *Acta Chim. Acad. Sci. Hung.* 17, 285-72 (1968) (in German).—The rate of deamination of Cu complexes of α - and β -alanine in 1 M NaOH at 100° was determined under various conditions. With α -alanine (I) ammonia was split off after an induction period of about 6 hrs. and the rate depended on the Cu concn. With β -alanine no deamination occurred under identical circumstances. The rate of deamination of I is increased if tartaric acid is added to the soln. It was found that L-tartaric acid (II) catalyzed the decompr. of L-alanine more than did either D-tartaric acid (III) or meso-tartaric acid (IV), this latter being the least effective catalyst. In the case of D-alanine the same phenomenon occurred, the catalytic effect being in the order III > II > IV. It is proposed that a mixed complex is formed in the course of the reaction and that specific stereochem. effects in this complex are responsible for differences in catalytic behavior. —Mark M. Jones

3
2 May

HUNGARY/Inorganic Chemistry. Complex Compounds.

C

Abs Jour: Ref Zhur-Khim., No 23, 1958, 76925.

Author : Nyilasi, Janos

Inst :

Title : Concerning the Complex of Copper with Ethylenediaminetetra-acetic Acid.

Orig Pub: Magyar kem. folyoirat, 1958, 64, No 2, 57-60.

Abstract: The desamination of various Cu complex with ethylene-diaminetetracetic acid (I) was studied at 100° in 1 n. alkaline media. It was established that NH₃ separated only at heating in the presence of O₂ of the air. A noticeable desamination is observed only at the ratio of 0.5 to 1 g-atom of Cu per 1 mole of the complex. In the opinion of the

Card : 1/2

HUNGARY/Physical Chemistry. Kinetics. Combustion. Explosions. Topochemistry. Catalysis. B

Abs Jour: Ref. Zhur. - Khimiya, No. 4, 1959, 11073

Author : Nyilesi J.

Inst : Not given

Title : The Role of Configuration in the Catalytic Desamidization of the Alanine Copper Complexes.

Orig Pub: Magyar kem. folyoirat, 1958, 64, No. 5, 160-163

Abstract: The speed of desamidization of the complexes of α - and β -alanine, containing different amounts of Cu, was investigated at 100° in 1% of NaOH. In the complexes of α -alanine, the speed of NH₃ liberation depends upon the quantity of the added metal; in the complexes of β -alanine NH₃ is not liberated. This fact, in the opinion of the author, is explained by dissimilar stabilities of the complexes. The speed of desamidization is greatly accelerated by the pres-

Card 1/2

NYILASI, J.

SCIENCE

PERIODICALS: ~~ACTA ZOOLOGICA~~. Vol. 64, No. 7/8 July/Aug. 1958
MAGYAR KEMIAI FOLYOIRAT

Nyilasi, J. Role of complex formation ar catalytic deamination processes. p. 29.

Monthly List of East European Accessions (EEAI) L, Vol. 3, No. 2,
February 1958, Unclass.

NYILASI J.

1 1
12. Metal complexes of amino acids. I. Study of the deamination of amino acids-copper complexes. J. Nyilasi, Magyar Kémiai Folyóirat, Vol. 64, 1958, No. 12, pp. 171-176, 6 figs., 2 tabs.

The rate of liberation of ammonia was investigated in *N*-NaOH medium at 100°C from complexes of various amino acids (monoamino monocarboxylic, sulphur-containing and cyclic amino acids, monoamino dicarboxylic acids) prepared with different amounts of copper. Ammonia was expelled by bubbling air (free of NH₃ and CO₂) through the mixture. It was found that the rate of deamination is the highest when the ratio amino acid to metal is 1 gram-mol : 0.95 gram-atom. Maximum decomposition rates with serine, threonine, tyrosine and cysteine require higher copper contents. An induction period is observed in the curves representing the amount of liberated ammonia vs. reaction time which indicates the formation of some intermediary compound. The different rates of liberation of ammonia with different amino acids is explained by the stability conditions of the copper complexes. In this relation the role of the electron-repelling or electron-attracting character of the groups connected to the asymmetric carbon of the amino acid is pointed out and the problems of steric requirements are discussed as well.

3
2 2 J (May)

462a (j)

NYILASI, Janos, Dr. (Budapest VIII Muzium korut 6)

Contribution to the metal complexes of amino acids. I. Investigation
of deamination of amino-acid copper complexes. In German. Acta chimica
Hung. 21 no.3:235-246 '59. (EEAI 9:5)

1. Institute of General and Inorganic Chemistry, L. Eotvos University,
Budapest.

(Metals) (Amino acids) (Complex compounds) (Deamination)
(Copper)

NYILASI, Janos, dr. (Budapest)

Contribution to the metal complexes of amin acids. II.
Investigation of the deamination of copper complexes of hetero-
cyclic amino acids and diamino-monocarbonic acids. Acta chimica
Hung 21 no.4:343-350 '59. (EBAL 9:6)

1. Institute of General and Inorganic Chemistry, L.Eotvos
University, Budapest. Vorgelegt von Gy.Bruchner.
(Metals) (Complex compounds) (Amino acids)
(Deamination) (Copper) (Heterocyclic compounds)
(Carboxylic acids)

NYILASI, Janos

Metal complexes of amino acids. Pt. 2. Magy kem folyoir 65 no.2:
81-84 F '59.

1. Eotvos Lorand Tudomanyegyetem Altalanos es Szervetlen Kemial
Intezete, Budapest.

Nyilasi, J.

Polyamine metal complexes. I. The deamination of polyamine-copper complexes. János Nyilasi (Univ. Technol., Budapest, Hung.). *Magyar Kem. Folyóirat* 65, 341-7 (1959).—Cu complexes of some di- and polyamines lose N in the form of NH₃. Amines unable to complex Cu ions do not lose N. Such amines are hydrazine and tetra-, penta-, and hexamethylenediamines. A linear decay curve in time was obtained in the case of the Cu complexes of ethylene-, propylene-, and trimethylenediamines that lost 12%, 12%, and 8% of their N after 1 hr. and 78%, 78%, and 52% after 16 hrs., resp. The ratio of Cu to N was 1:2. Changing the ratio to 1:8 did not change the rate of N loss. The deamination of the diamine complexes is attributed to their ring formation; only these diamines are able to form 5 and 6 membered rings. Derivs. of diamines have an induction period before the deamination starts. Ethylenediaminetetraacetic acid (EDTA) Cu complex loses 8% N in 8 hrs. and 32% in 16 hrs. (1Cu: 2N ratio used). Using 1 Cu:8N ratio reduces the N loss to 3%. The induction period is 4 hrs. with mono(hydroxyethyl)tris(hydroxymethyl)ethylenediamine, which lost 28% N after 16 hrs. (1Cu: 2N ratio). The Cu complex of diaminocyclohexanetetracetic acid had no induction period, lost after 16 hrs. 3% N using 1Cu:2N ratio, 0.6% N using 1Cu:8N ratio. The N loss of the Cu complexes of diethylenetriamine and of triethylenetriamine is 19% and 12% after 1 hr. and 78% and 74% after 16 hrs., resp. The ratio used was 1Cu:2N, but change to 1Cu:8N ratio does not effect the deamination. No induction period was observed. On the contrary, after initial high rate (48% and 35% N loss after only 3 hrs.), the decay curves flatten out. All the expts. were carried out in 0.04M soln. (in amines) and at 100°. N content was detd. by the Kjeldahl method.

Peter Marcel Bauer

3
1-β-(nβ)

NYILASI, Janos, dr., egyetemi docens (Budapest)

Janos Irinyi. Term tud kozl 4 no. 11: 516-518 N '60.

NYILASI, Janos, dr.

Metal complexes of polyamines. I. Deamination of the copper complexes
of polyamines. Acta chimica Hung 22 no.1:51-64 '60. (ZBAI 9:9)

I. Institut fur Allgemeine und Anorganische Chemie der L.Eotvos
Universitat, Budapest. Vorgelegt von Gy.Bruckner.
(Copper) (Amines) (Complex compounds)
(Deamination)

NYILASI, JANOS

Bistro: 4E2c(j)

4
JANOS

Polyamine-metal complexes. II. Deamination of various diamine-metal complexes. János Nyilasi (Estváros L. Tudományegyetem, Budapest, Hungary). *Magyar Kem. Folyóirat* 66, 312-19 (1960); cf. CA 54, 10627a.—Investigations were performed on the catalytic oxidn. of diamines [general formula: $\text{NH}_2-(\text{CH}_2)_n-\text{NH}_2$] in the presence of various metals (Cr, Mn, Fe, Co, Ni, Zn, Pd, Ag, Cd, Ce, Os, Pt, Au, Hg) in basic media. The reaction medium was $\text{N} \cdot \text{NaOH}$ soln. The reactions were performed in 30-ml. solns. through which was bubbled 20 l. of air or N/hr . The concn. of the amines was 0.04M and of the metal 0.25 g.-atom/mol. of diamine. Only Co, Cu, Pd, Os, and Au have a catalytic effect in the presence of O. NH_2 was also liberated in the absence of O from complexes composed of diamines and of Pd, Os, or Au, but the reaction rate of deamination was smaller. No catalytic effects were noted with Co and Cu in the absence of O. With Os and Au, no reaction was observed after 2 hrs. of bubbling N through the solns., and only a small part of the diamine was transformed. For compds. of longer chain length the reaction rate is smaller. The presence or absence of O does not affect the catalytic effect of Pd. Co and Cu liberated NH_2 from the 1,2-diaminoethane and propane and to a smaller extent from 1,2-diaminopropane, but did not liberate NH_2 from 1,4-diaminobutane, 1,5-diaminopentane, or 1,6-diaminohexane. Cu and Co form chelate complexes with the amines. Os and Au have a catalytic effect on all diamines. Under these conditions, only these metals which can change oxidation states in the amine complexes have a deamination effect.

André Varsányi

NYILASI, Janos, dr., egyetemi docens (Budapest)

Karoly Than. Term tud kozl 5 no.6:273-275 Je '61.

1. "Termeszettudomanyi Kozlony" szerkeszto bizottsagi tagja.

NYILASI, Janos

Metal complexes of amino acids.III. Deamination of various metal complexes of amino acids. Magy kem folyoir 67 no.6:269-276 Je '61.

1. Eotvos Lorand Tudomanyegyetem Altalanos es Szervetlen Kemial Tanszeke, Budapest.

NYILASI, Janos; BOKSAY, Zoltan

Polyamine metal complexes. IV. Kinetic investigation of the oxidation of ethylenediamine-copper complex. Magy kem folyoir 67 no.12:
541-545 D '61.

1. Eotvos Lorand Tudomanyegyetem Altalancs- es Szervetlen-Kémiai
Tanszeka, Budapest.

NYILASI, Janos, dr. (Budapest VIII ,Muzeum korut 6-8)

Metal complexes of amino acids.III.Deamination of various
amino acid complexes. Acta chimica Hung 30 no.2:221-231 '62

1. Institut fur Allgemeine und Anorganische Chemie der L.Eotvos
Universitat.

NYILASI, Janos; BOKSAY, Zoltan

Polyamine metal complexes.III.Catalytic decomposition of diamine
metal complexes. Magy kem folyoir 67 no.2:52-59 F '62.

1. Eotvos Lorand Tudomanyegyetem Altalanos es Szervetlen Kemial
Intezete, Budapest.

NYILASI, Janos

Metal complexes of amino acids. IV. Role of the formation of glyoxylic acid in the oxidative diamination of glycocoll-copper-complex. Magy kem folyoir 68 no.1:27-31 Ja '62.

1. Eotvos Lorand Tudomanyegyetem Altalanos- es Szervetlen Kemial Tanszeke.

(Amino acids) (Metals) (Glycocol)

(Glyoxylic acid)

NYILASI, Janos

Metal complexes of amino acids.V.The role of alkali concentration
in the decomposition of glycocoll-copper-complex. Magy kem
folyoir 68 no.6:249-255 Je '62.

1. Eotvos Lorand Tudomanyegyetem Altalanos- es Szervetlen-Kemiai
Tanszeke, Budapest.

BIHARINE VARGA, Magdolna; NYILASI, Janos

Data on the hydrolysis of polymyxine-B and its copper complex.
Magy kem folyoir '68 no.7:290-293 J1 '62.

1. Eotvos Lorand Tudomanyegyetem Altalanos es Szervetlen-Kemial
Tanszeka, Budapest; Magyar Tudomanyos Akademia Szervetlen-Kemial
Kutatocsoportja; Gyogyszeripari Kutato Intezet.

NYILASI, Janos, dr., egyetemi docens (Budapest)

Bela Lengyel; in commemoration of a great Hungarian chemist on the 50th anniversary of his death. Term tud kozl 7 no.3:128-129 Mr '63.

1. "Termeszettudomanyi Kozlony" szerkeszto bizottsagi tagja.

MILLASI, Janos, dr. (Budapest, VIII., Muzeum korut 6-8)

On the metal complexes of amino acids. Pt. 5. Acta chimica
Hung 35 no.4:465-480 '63.

1. Institut fur Allgemeine und Anorganische Chemie der Lorand
Eotvos Universitat, Budapest, und Forschungsgruppe fur
Anorganische Chemie der Ungarischen Akademie der Wissenschaften.

BIHARI-VARGA, Magdolna (Mrs), dr. (Budapest, VIII., Muzeum korut 6-8);
NYILASI, Janos, dr. (Budapest, VIII., Muzeum korut 6-8)

On the hydrolysis of polymyxin B and its copper complex. Acta
Chimica Hung 37 no.1:117-124 '63.

1. Forschungsinstitut fur die Pharmazeutische Industrie, Budapest,
Institut fur Allgemeine und Anorganische Chemie der Lorand Eotvos
Universitat, Budapest, und Forschungsgruppe fur Anorganische
Chemie der Ungarischen Akademie der Wissenschaften, Budapest.

NYILASI, Janos

Metal complexes of amino acids. Pt.6. Magy kem folyoir 69
no.9:393-396 S '63.

1. Eotvos Lorand Tudomanyegyetem Altalanos es Szervetlen
Kemiai Tanszeke, Budapest.

L 17637-66 EMP(j)/T RM

ACC NR: AT 6009208

SOURCE CODE: HU/2502/65/043/001/0033/0044

AUTHOR: Nyilasi, Janos—Nilashi, I. (Doctor); Pomogats, Erzsebet—Pomogach, E.

30
BTORG: Department of General and Inorganic Chemistry, L. Eotvos University, Budapest;
Academic Research Group for Inorganic Chemistry, BudapestTITLE: Metal complexes of peptides. Part 3: Oxidative deamination of the
glycylpeptide - cobalt complexes

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 43, no. 1, 1965, 33-44

TOPIC TAGS: metal compound, complex molecule, polypeptide, sodium hydroxide,
catalysis, ascorbic acid, biochemistry, cobalt compound

ABSTRACT:

The rates of oxidative deamination were investigated in sodium hydroxide solutions of various concentrations. The glycylpeptides underwent such deamination in a broad NaOH concentration range, while the glycine did so only in a narrow concentration range. The peptide chain length also affected the rates. Studies were also undertaken to establish the catalytic effect of ascorbic acid on the deamination rate. Orig. art. has: 5 figures and 4 tables. [JPRS]

SUB CODE: 07, 06 / SUBM DATE: 22Apr64 / ORIG REF: 007 / OTH REF: 002

Card 1/1

NYILASI, Janos, dr. (Budapest, VIII., Muzeum korut 6-8); ORSOS, Piroska (Miss)
(Budapest, VIII., Muzeum korut 6-8)

Metal complexes of peptides. Pt.4. Acta chimica Hung 43 no.1;
45-51 '65.

1. Lehrstuhl fur Allgemeine und Anorganische Chemie der Lorand
Eotvos Universitat und Akademische Forschungsgruppe fur
Anorganische Chemie, Budapest. Submitted April 22, 1964.

L 16480-66 EWP(j)/T EM
ACC NR: AF6008579

SOURCE CODE: IU/0005/65/071/002/0047/0049

AUTHOR: Nyilasi, Janos; Pomogatz, Erzsebet

31

B

ORG: Department of General and Inorganic Chemistry, Eotvos Lorand Scientific University, Budapest (Eotvos Lorand Tudomanyegyetem Altalanos- es Szervetlen-Kemial Tanszeke); Academic Research Group for Inorganic Chemistry, Budapest (Szervetlen-Kemial Akademial Kutato Csoport)

TITLE: Metal complexes of aminoacids. Part 7: Function of the alkali concentration in the oxidation of aminoacid-cobalt complexes 14155

SOURCE: Magyar kemial folyoirat, v. 71, no. 2, 1965, 47-49

TOPIC TAGS: organocobalt compound, amino acid, oxidation, colorimetry, ammonia

ABSTRACT: The deamination rate and stability of monoaminomonocarboxylic acids, monoaminodicarboxylic acids, and hydroxyaminoacids to oxidation was investigated at various sodium hydroxide concentrations. Ammonia evolved only from acids which had an amino group in the α -position. Cobalt complexes formed only in a relatively narrow alkali concentration range. The studies were undertaken with the aid of colorimetric techniques. Orig. art. has: 2 figures and 2 tables. [JPRS]

2

SUB CODE: 07 / SUBM DATE: 05Feb64 / ORIG REF: 003 / OTH REF: 003

Card 1/1 vmb

NYILASI, Janos; BIHARINE VARGA, Magdolna; ORSOS, Piroska

Metal complexes of peptides. Pt.2. Magy kem folyoir 71 no.2:
49-50 F '65.

1. Chair of General and Inorganic Chemistry of Lorand Eotvos
University, Budapest, and Research Group of Inorganic Chemistry
of the Hungarian Academy of Sciences, Budapest. Submitted
April 21, 1964.

L 47256-66 EWP(j) RM
ACC NR: AP6034691

SOURCE CODE: HU/0005/66/000/003/0119/0122

AUTHOR: Nyilasi, Janos, Biharne, Varga Magdolna and Orsos, Piroska, Department of General and Inorganic Chemistry (Alkalanos es Szervetlen Kemial Tanszek) of Eotvos Lorand University of Sciences (Eotvos Lorand Tudomanyegyetem), Budapest.

"Metal Complexes of Peptides. V. Study of the Hydrolysis and Oxidative Deamination of Dipeptide-Metal Complexes"

Budapest, Mazsar Kemial Polycirat, Vol 72, No 3, Mar 66; pp 119-122.

Abstract: A study was made of the complex formation of various peptides in alkaline media. Copper-, nickel- and cobalt ions were used for the formation of the complexes. The composition of the complexes was investigated and the effect exerted by the formation of the complex on the alkaline hydrolysis and oxidative deamination of the peptides was studied. A relationship was found between the composition of the peptides and its tendency to hydrolysis and oxidation. Orig. art. has 1 figure and 3 tables. [JPRS: 36,002]

TOPIC TAGS: complex molecule, organometallic compound, hydrolysis

SUB CODE: 07 / SUBM DATE: 26 Jun 65 / ORIG REF: 004/ OTH REF: 019

Card 1/1 LC

0721 1820

L 00705-67

ACC NR: ATG035473

SOURCE CODE: HU/2502/66/047/003/0291/0299

AUTHOR: Nyilasi, Janos-Nilashi, Ya. (Doctor; Budapest); Bihari-Varga, Magdolna-Bikhari-Varga, M. (Doctor; Budapest); Orsos, Piroska--Orshosh, P. (Budapest)

ORG: Chair for General and Inorganic Chemistry, L. Eotvos University, Budapest

TITLE: Metal complexes of peptides. Part 5: Investigation of the hydrolysis and oxidation of dipeptide-metal complexes

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 47, no. 3, 1966, 291-299

TOPIC TAGS: intermolecular complex, hydrolysis, reaction rate, oxidation, paper chromatography, spectrometry, chemical composition.

ABSTRACT:

The rate of hydrolysis of Gly-Gly, α -Ala-Gly, Leu-Gly, Gly- α -Ala, Gly-Leu, α -Ala- α -Ala, Gly- β -Ala, α -Ala- β -Ala, β -Ala-Hist, Gly-Tyr, Tyr-Gly, α -Ala-Tyr, Tyr- α -Ala, Leu-Tyr, and Gly-Trypt di-peptides and their metal (Cu, Ni, Co) complexes at 100°C was investigated with the aid of paper-chromatographic techniques and spectrometry. The composition of the complexes formed in an alkaline medium was determined and the effect of complex formation on the alkaline hydrolysis and oxidative desamination was investigated. There was a correlation between the composition of the complexes and the tendency of the peptides to undergo hydrolysis and oxidation. Orig. art. has: 1 figure and 3 tables. [JPRS: 36,464]

SUB CODE: 07 / SUBM DATE: 28Jul65 / ORIG REF: 006 / OTH REF: C21

Card 1/1 mjs

00705-679A

TAKACS, Istvan; NYIRA, Istvan

A modified method for the determination of total estrogens in pregnancy. Kicerletes orvostud. 13 no.3:241-244 Je '61.

1. Debreceni Orvostudomanyi Egyetem Szulesszeti es Nogyogyaszati Klinikaja.

(PREGNANCY physiol.) (ESTROGENS physiol)

MIRADI, L.

"On the execution of our plan of forest-road construction." p. 161.

AZ ERDO (Orszagos Erdeszeti Egyesulet). Budapest, Hungary, Vol. 8,
No. 5, May 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Uncla.

NYIRADI, Lajos

An account of the work of the ten-year-old Planning Office for
Forestry and Wood Industry. Erdö 12 no. 12:531-532 D'63.

1. Erdőgazdasági és Faipari Tervező Iroda igazgatója, Budapest.

NYERUDI, T.

Application of the theory of three-dimensional utilization of material
and computation of material norms for edged sawn pine timber. p. 267.
FAIPAR. Budapest. Vol. 5, no. 10, Oct. 1955.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 2, Feb. 1956.

NYIRC, R.

New oligocene foraminifers from the chatter marks of the area of Budapest,
p. 67, (FOLOTANIKOZLONY. BULLETIN OF THE HUNGARIAN GEOLOGICAL SOCIETY,
Budapest, Hungary). Vol 84, No. 1/2, Jan./June 1954.

SO: Monthly List of East European Accessions, (EEAI), 1C, Vol. 4, No. 5,
May 1955, Uncl.

EIDUS, L.; KOVACS, M.; NYIREDY, G.

Investigation on pleural absorption and secretion of PAS. Tuberk.
kerdesei 4 no.4:10-11 Dec 51. (CLML 21:5)

1. Doctors. 2. Clinic of Pulmonary Diseases (Director--Prof. Dr. Ferenc Kovata), Budapest University.

SULE, E.: NYIREDY, G.

The treatment of tuberculous empyema. Orv. hetil. 92 no.16:521-524
22 Apr 1951. (CIML 245)

1. Doctors. 2. Clinic for Pulmonary Diseases (Director -- Prof. Dr. Ferenc Kovats), Budapest University.

NYIREDY, G.; KOVACS, M.; HUNYADI, G.; ROKA, J.

Experiences in the treatment of tuberculous empyema with isonicotinic acid hydrazide. Orv. hetil. 93 no. 45:1284-1285 9 Nov 1952. (CLML 24:1)

1. Doctor for Nyiredy, Kovacs, and Hunyadi. 2. Clinic for Pulmonary Diseases (Director -- Prof. Dr. Ferenc Kovats), Budapest Medical University.

MYIRDY, G.; EIDUS, L.; KOVACS, M.

Local antibiotic therapy of tuberculous empyema. Orv. hetil. 94 no.45:
1248-1251 8 Nov 1953. (CML 25:5)

1. Doctor. 2. Tuberculosis Clinic (Director -- Prof. Dr. Ferenc Kovacs).
Budapest Medical University.

HUTAS, Imre, dr.,; NYIREDY, Geza, dr.,; VARGHA, Geza, dr.

Therapy of hypoventillation, occurring with hemoptysis. tuberk.
kerdesei 8 no.6:169-173 Dec 55.

1. A Budapesti Orvostudomanyi Egyetem Tüdogyogyaszati Klinikaja
(igazgató: Kováts Ferenc dr. egy. tanár közleménye.

(ATELECTASIS

posthemoptysisic, surg. (Hun))

(HEMOPTYSIS, compl.

atelectasis, surg. (Hun))

EIDUS, Laszlo, dr.,; NYIREDY, Geza, dr.,; LANYI, Miklos, dr.

Principles of bacteriological diagnosis in pulmonary
tuberculosis. Orv. hetil. 96 no.48:1334-13341 27 Nov 55.

1. A Budapesti Orvostudomanyi Egyetem Tudogyogyszati Klinika janak
(igazgato: Kovacs Ferenc dr., egyet. tanar) kozlem.
(TUBERCULOSIS, PULMONARY diagnosis,
bacteriol. technic)

KOVATS, Ferenc, Dr.; NYIREDY, Geza, Dr.

Simple method for obtaining sterile bronchial secreta by bronchoscope.
Orv. hetil. 99 no.51:1804-1805 21 Dec 58.

1. A Budapesti Orvostudomanyi Egyetem Tudogyogyaszati Klinikajának
(igazgató: Kovats Ferenc dr. egyet. tanár, az orvostudományok doktora)
közleménye.

(BRONCHI, pathol.

sterile bronchoscopic method for obtaining bronchial
secreta (Hun))

HUTAS, Imre, dr.; NYIREDY, Géza, dr.

Trypsin aerosol therapy of chronic pulmonary diseases.
Tuberkulosis 12 no.11:258-260 M '59.

1. A Budapesti Orvostudományi Egyetem Tudagyógyászati
Klinikájának (Igazgató: Kováts Ferenc dr., egyetemi tanár,
az orvostudományok doktora) kozlemenye.
(BRONCHITIS ther)
(TRYPSINS ther)

FERENCZY, Sandor, dr.; NYIREDY, Geza, dr.

Experiences in the therapy of pulmonary abscess. Orv.hetil.
100 no.41:1483-1486 0 '59.

I. A Budapesti Orvostudomanyi Egyetem Tudogyogyszati Klinika janak
(igazgato: Kovacs Ferenc dr. egyetemi tanar), a Janos Korhaz
Bronchologiai osztaly (foorvos: Horlay Bela dr.) es a Fovarosi
Tbc. Gondozó intézetek (igazgato: Szakkay Antal dr.) Bronchologiai
Rendelesenek (foorvos: Ferenczy Sandor dr.) kozlemenye.
(LUNG ABSCESS ther.)

SZUCS,Sandor,dr.; NYIREDY,Geza,dr.; VARGA,Zoltan,dr.: GAAL,Jozsef,dr.

Bronchographic aspects of small bronchi in tuberculosis. Tuberkulosis
13 no.2:47-50 F '60.

1. A Budapesti Orvostudomanyi Egyetem Tudogyogyaszati Klinika
(igazgato: Kovats,Ferenc,dr. egyetemi tanar, az orvostudomanyek
doktora) koslemenye.
(TUBERCULOSIS PULMONARY radiogr.)

KOVÁCS, FERENC, dr.; HUTAS, Imre, dr.; NYIREDY, Gyöza, dr.

Trypsin inhalation before bronchography. Orv.hetil. 101 no.31:
1096-1098 31 J1 '60.

1. Budapesti Orvostudományi Egyetem, Tudogyógyaszati Klinika
(TRYPSONS ther.)
(BRONCHI radiogr)

KOVATS, Ferenc, dr.; NYIREDY, Géza, dr.

Late chronic pyothorax. Orv.hetil. 101 no. 46:1626-1628 13 II '60.

1. Budapesti Orvostudományi Egyetem, Tudagyogyasszati Klinika.
(EMPTEMA case reports)

NYIREDY, Geza, dr.; ORBAN, Tibor, dr.; KOROMPAI, Erzsebet, dr.

Contribution to the pathogenesis of polycystic lungs. Tuberkulosis 14
no.3:81-83 Mr '61.

1. A Budapesti Orvostudomanyi Egyetem Tudagyogyaszati Klinikajának
(igazgató: Kováts Ferenc dr. az orvostudományok doktora), a János
korház Rendelőintézet (igazgató: Tako József dr.) Szemészeti és I
Belosztalyának közleménye.

(LUNG DISEASES etiol)

SZUCS, Sandor, dr.; NYIREDY, Geza, dr.; NAGY, Piroska, dr.; VIDEKI, Karoly, dr.

Bronchogenic cysts of the mediastinum. Tuberkulosis 14 no.8:246-249
Ag '61.

1. A Budapesti Orvostudomanyi Egyetem Tudogyogyaszati Klinikaja (Igazgato: Kovats Ferenc dr. egyetemi tanar, az orvostudomanyok doktora)
kozlemenye.

(MEDIASTINUM dis) (BRONCHI dis) (CYSTS)

ORBAN, Tibor; NYIREDY, Gaze.

Eye changes in cystic diseases of the lungs. Szemeszet 98 no. 3:129-135
S '61.

1. A Janos-korhaz es Rendelointezet szemossztalyanak (Főorvos: Grosz Istvan, az orvostudomanyok kandidatusa) es a Budapesti Orvostudomanyi Egyetem Tudogyogyaszati Klinikaja (Ig.: Kovats Ferenc, egyetemi tanar, az orvostudomanyok doktora) kozlemenye.

(LUNG DISEASES pathol) (EYE pathol)

MIKHOTSI, LASLO [Mihoci, Laszlo], (Budapest); NIREDY, Geza (Nyiredi, Geza),
(Budapest).

Treatment of cardiopulmonary insufficiency. Probl. tub. no.8:
63-65'62. (MIRA 16:9)
(TUBERCULOSIS) (PULMONARY HEART DISEASE)

NYIREDY, Géza, dr.; BALAS, Attila, dr.

Diffuse mesothelioma of the pleura. Tuberkulózis 15 no.1:22-26 Ja '62.

1. A Budapesti Orvostudományi Egyetem Tudagyogyaszati Klinikájának
(Igazgató: Kováts Ferenc dr. egyetemi tanár, az orvostudományok doktora)
és a VIII kerületi Tanacs Balassa János Korház (Igazgató: Szokodi-
Dimitrov Daniel dr. kandidátus) I Sebészeti Osztályának Főorvos:
Drexler Miklós dr.) közleménye.

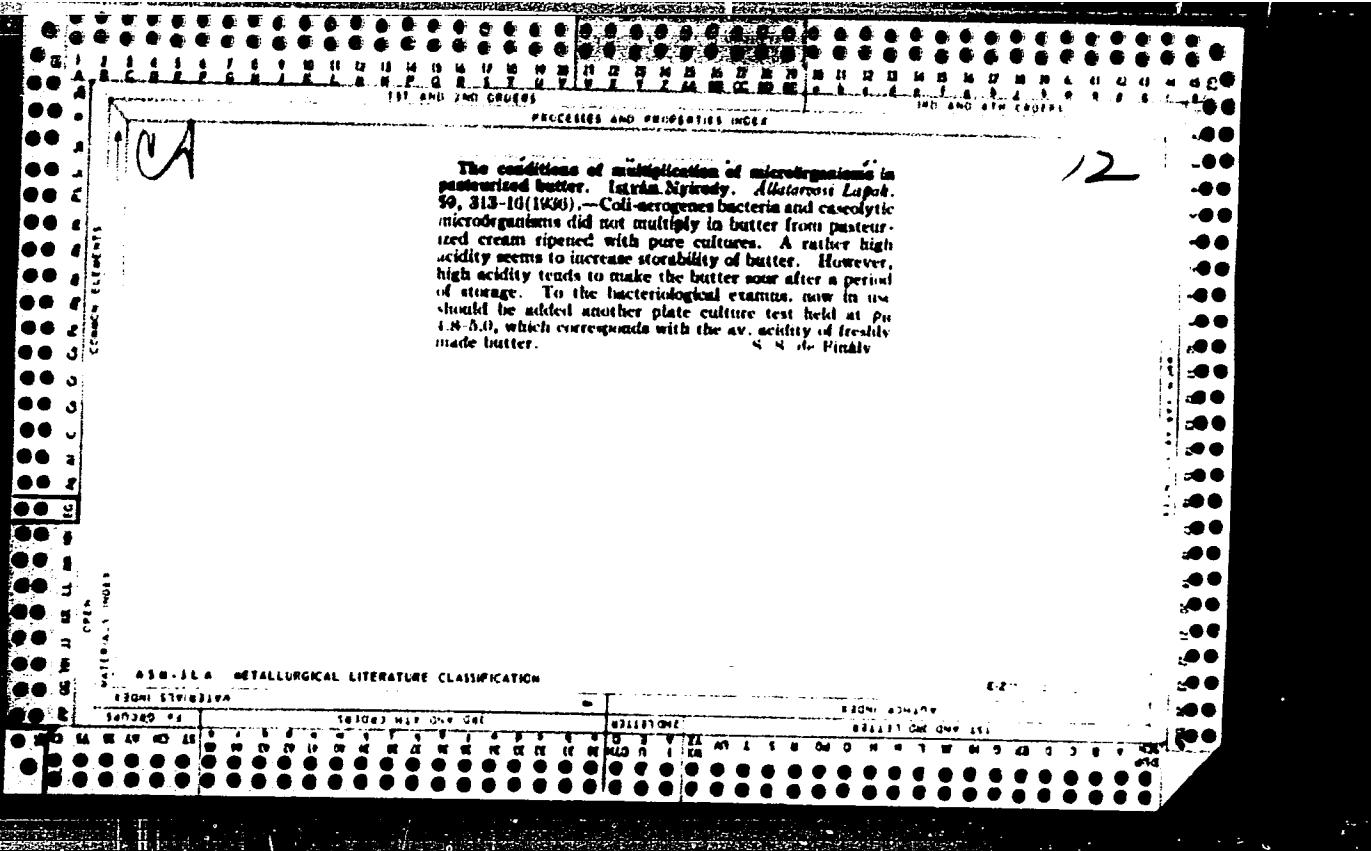
(PLEURA neopl) (MESOTHELIOMA case reports)

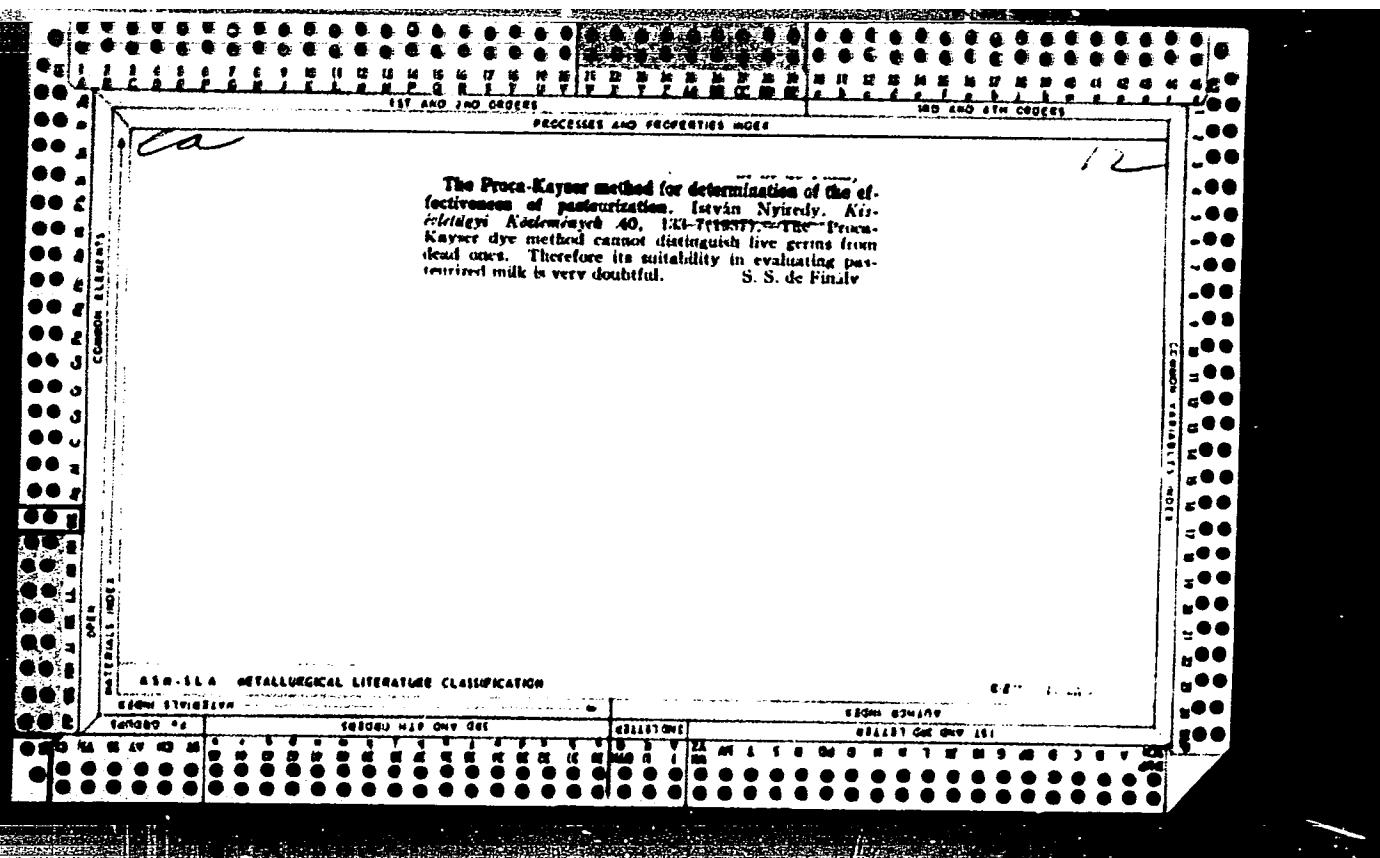
KOVATS, Ferenc, dr.; Nyiredy, Geza, dr.; SZUCS, Sandor, dr.

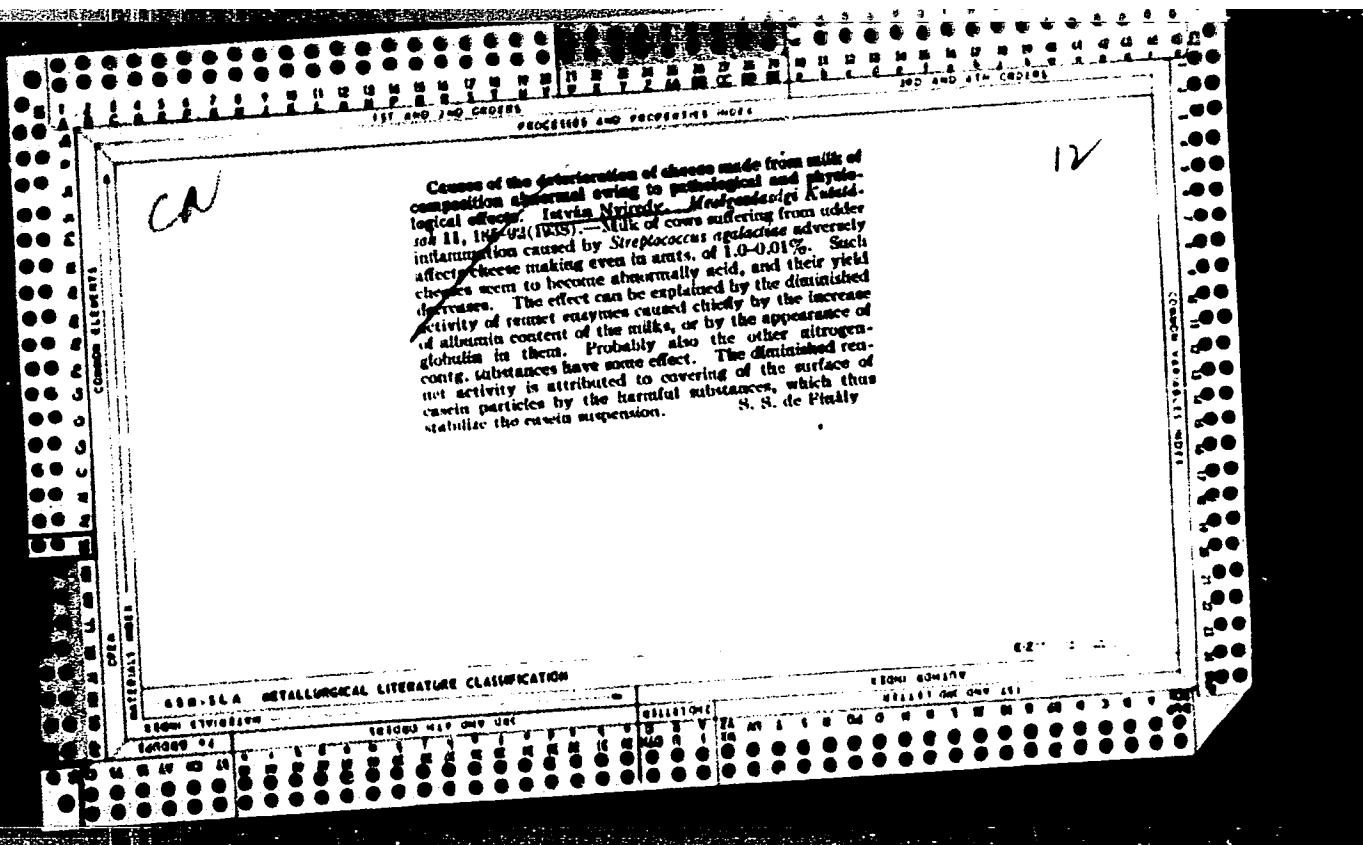
The effect of bronchographic examination on respiratory function.
Orv. hetil. 103 no. 9: 395-397 Mr '62.

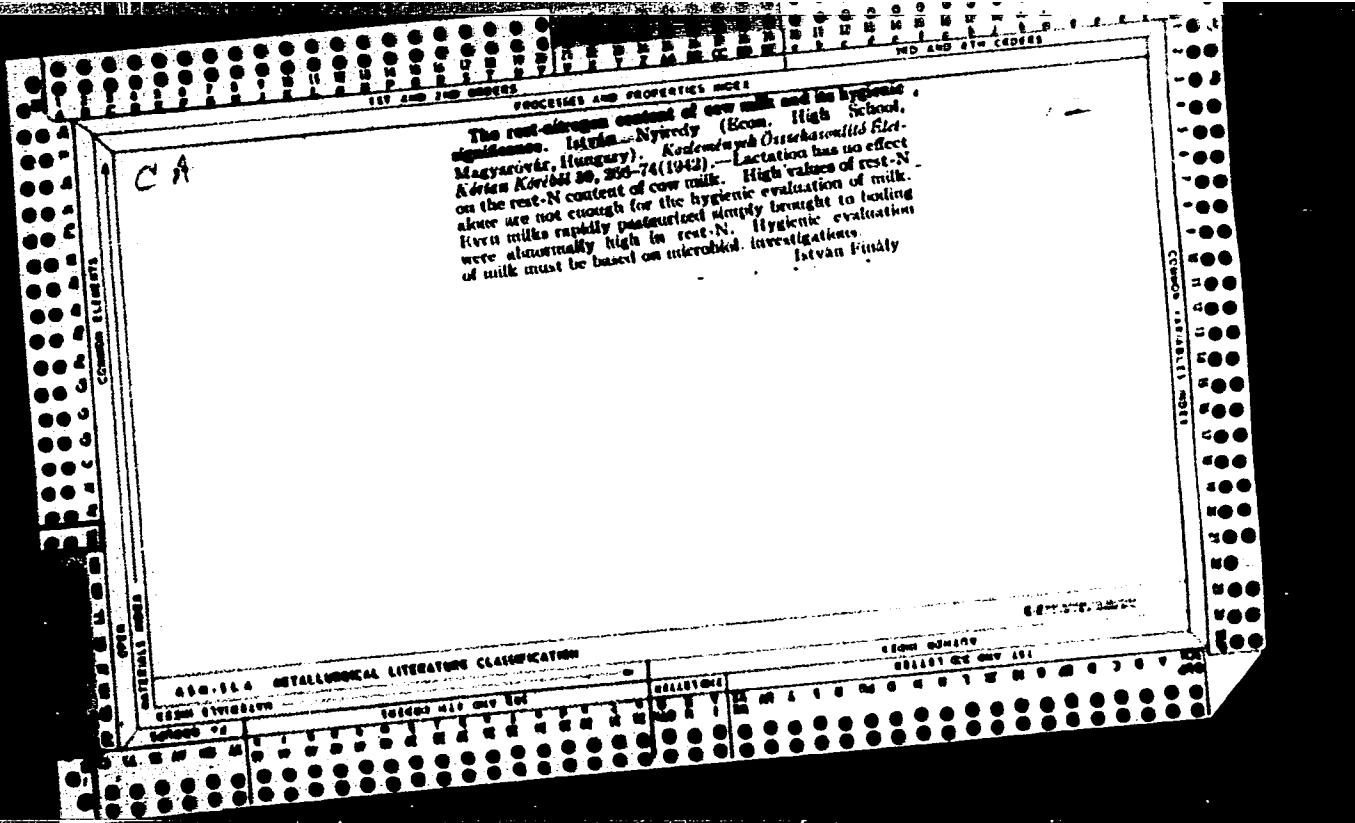
1. Budapesti Orvostudomanyi Egyetem, Tudogyogyszati Klinika.

(BRONCHI radiography) (RESPIRATION pharmacol)
(CONTRAST MEDIA pharmacol)









HUNGARY/Diseases of Farm Animals - Diseases Caused by
Bacteria and Fungi.

R.

Abs Jour : Ref Zhur - Biol., No 6, 1958, 26200
Author : Nyiredy, Istvan
Inst :
Title : The Value of Serological Semen Examination in the Fight
Against Brucellosis.
Orig Pub : Magyar állatorv. lapja, 1957, 12, No 4-5, 107-109
Abstract : A large number of brucella bacilli was extracted from
the semen of a bull, who showed a positive reaction in
a serological blood test and a negative one in a semen
test when the same method was used, and who had no cli-
nical symptoms of brucellosis. This points to inade-
quate effectiveness of the serological method when tes-
ting semen. Therefore, on farms where brucellosis is
present, the semen of bulls should be subjected to mi-
croscopic and bacteriologic examination monthly

Card 1/2

HUNGARY/Diseases of Farm Animals - Diseases Caused by
Bacteria and Fungi.

R.

Abs Jour : Ref Zhur - Biol., No 6, 1950, 26280

although their serological and blood tests are negative,
as well as be used for inoculating laboratory animals.
Ring reaction is a more reliable semen testing method
than the classic PA method. Traces of a ring in a one-
to-five solution already arouse suspicion of brucellosis
being present in the genitals.

Card 2/2

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HUNGARY

NYIREDY, Istvan, Dr, doctor of veterinary medicine, National Institute of Veterinary Medicine (Orszagos Allategeszsegugyi Intezet) (Director: KADAR, Tibor, Dr, candidate of veterinary medicine).

"Factors Decreasing the Value of the Finding of Coli Organisms in the Hygienic Evaluation of Plant Fodder."

Budapest, Magyar Allatorvosok Lapja, Vol 17, No 11, Nov 62, pp 415-417.

Abstract: [Author's English summary] In natural food stuffs as well as in commercial fodder of plant origin the author found large numbers of bacteria which could be mistaken for coli organisms by routine testing with Klimmer's medium. Flavobacterium rhenanum, F. diffusum and F. rigeense were identified. Since scils used for fodder production are usually infected with fecal coli organisms and since the above mentioned bacteria can be mistaken for them, the author proposes the test of fodder of plant origin for the presence of enterococci instead of coli organisms. [One American, 1 German reference.]

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HUNGARY

NYIREDY, Istvan, Dr. National Animal Health Institute (Orszagos Allat-egeszsegugyi Intezet) (director: KADAR, Tibor, Dr, candidate of Veterinary Sciences).

"The Microflora, Germ Count and Microbiological Evaluation of Industrial Food Mixtures and Their Components."

Budapest, Magyar Allatorvosok Lapja, Vol 6, No 18, June 63, pp 235-239.

Abstract: [Author's Hungarian summary] It was found by the author that industrial food mixtures and supplements contain bacteria of greatly varying strains as well as molds and yeasts. Total microbial counts are reported for several food mixtures. After evaluation of the results from statistical and animal hygienic points of view, microbiological standards for processed fodder are presented. In addition to the determination of the microflora, counts of coli, enterococcus, proteolytic, anaerobic spore bacteria, mold, and total microbes are taken into consideration in the evaluation of the fodder. The limit values within which the fodder is considered unobjectionable, are presented in a table. 2 Hungarian references.